pneumonia) associated with *Pasteurella multocida* susceptible to erythromycin.

(iii) *Limitations.* For intramuscular use only. Do not use in female dairy cattle over 20 months of age. Do not slaughter treated animals within 6 days of last treatment. To avoid excess trim, do not slaughter within 21 days of last injection.

[58 FR 43795, Aug. 18, 1993]

§ 522.840 Estradiol.

(a) *Specifications.* Each silicone rubber implant contains 25.7 or 43.9 milligrams of estradiol.

(b) *Sponsor.* See 000986 in § 510.600(c) of this chapter.

(c) *Conditions of use.* It is used for implantation in steers and heifers as follows:

(1) *Amount.* Insert one 25.7-milligram implant every 200 days; insert one 43.9-milligram implant every 400 days.

(2) *Indications for use.* For increased rate of weight gain in suckling and pastured growing steers; for improved feed efficiency and increased rate of weight gain in confined steers and heifers.

(3) *Limitations.* For subcutaneous ear implantation in steers and heifers only. A second implant may be used if desired. No additional effectiveness may be expected from reimplanting in less than 200 days for the 25.7-milligram implant or 400 days for the 43.9 milligram implant. Increased sexual activity (bulling, riding, and excitability) has been reported in implanted animals.

[51 FR 22276, June 19, 1986, as amended at 57 FR 41861, Sept. 14, 1992]

§ 522.842 Estradiol benzoate and testosterone propionate in combination.

(a) *Chemical names.* (1) Estradiol benzoate: 1,3,5(10)-Estratriene-3,17 beta-diol 3-benzoate.

(2) Testosterone propionate: 17beta-Hydroxyandrost-4-en-3-one propionate.

(b) *Sponsor.* See Nos. 000856 and 021641 in § 510.600(c) of this chapter.

(c) *Related tolerances.* See §§ 556.240 and 556.710 of this chapter.

(d) *Conditions of use.* It is used for implantation in heifers as follows:

(1) *Amount.* 20 milligrams of estradiol benzoate and 200 milligrams of testosterone propionate per dose.

(2) *Indications for use.* Growth promotion and improved feed efficiency.

(3) *Limitations.* For heifers weighing 400 pounds or more; for subcutaneous ear implantation, one dose per animal; not for use in dairy or beef replacement heifers.

(e) *NAS/NRC status.* These conditions are NAS/NRC reviewed and deemed effective. Applications for these uses need not include effectiveness data as specified by § 514.111 of this chapter, but may require bioequivalency and safety data.

[40 FR 13858, Mar. 27, 1975, as amended at 49 FR 29778, July 24, 1984; 61 FR 5506, Feb. 13, 1996]

§ 522.850 Estradiol valerate and norgestomet in combination.

(a) *Specifications.* The product is a two-component drug consisting of the following:

(1) An implant containing 6.0 milligrams of norgestomet.

(2) An injectable solution (sesame oil) containing 3.0 milligrams of norgestomet and 5.0 milligrams of estradiol valerate per 2 milliliters.

(b) *Sponsor.* See 050604 in § 510.600(c) of this chapter.

(c) *Conditions of use*—(1) *Amount.* One implant and 2 milliliters of injection at time of implantation.

(2) *Indications for use.* For synchronization of estrus/ovulation in cycling beef cattle and non-lactating dairy heifers.

(3) *Limitations.* Insert implant subcutaneously in the ear only; then immediately inject solution intramuscularly only. Counting the day of implantation as day 1, remove the implant on day 10. Collect all implants as they are removed and burn them. While animals are restrained for artificial insemination, avoid other treatments such as vaccinations, dipping, pour-on grub and louse prevention, spraying, etc. When inseminating without estrus detection, the entire treated group should be started at 48 hours after the last implant has been removed and should be completed within 6 hours. Where estrus detection is preferred, insemination should be approximately 12 hours after first detection of estrus. Those that do not conceive can be re-bred when they return

to estrus approximately 17 to 25 days after implant removal. Do not use in cows producing milk for human consumption.

[47 FR 55477, Dec. 10, 1982, as amended at 48 FR 49656, Oct. 27, 1983; 51 FR 33592, Sept. 22, 1986; 54 FR 1165, Jan. 12, 1989]

§ 522.863 Ethylisobutrazine hydrochloride injection.

(a) *Specifications.* The drug is a sterile aqueous solution. Each milliliter contains 50 milligrams of ethylisobutrazine hydrochloride.

(b) *Sponsor.* See No. 011716 in § 510.600(c) of this chapter.

(c) *Conditions of use.* (1) It is used in dogs as a tranquilizer.[1]

(2) It is administered intramuscularly at a dosage level of 2 to 5 milligrams of ethylisobutrazine hydrochloride per pound of body weight for profound tranquilization. It is administered intravenously at a dosage level of 1 to 2 milligrams of ethylisobutrazine hydrochloride per pound of body weight to effect.[1]

(3) It is not to be used in conjunction with organophosphates and/or procaine hydrochloride because phenothiazines may potentiate the toxicity of organophosphates and the activity of procaine hydrochloride.[1]

(4) Federal law restricts this drug to use by or on the order of a licensed veterinarian.[1]

[40 FR 13858, Mar. 27, 1975, as amended at 46 FR 48642, Oct. 2, 1981; 61 FR 8873, Mar. 6, 1996]

§ 522.883 Etorphine hydrochloride injection.

(a) *Chemical name.* 6,7,8,14 - tetrahydro - alpha - methyl - alpha - propyl - 6,14 - endo-ethenooripavine-alpha-methanol hydrochloride.

(b) *Specifications.* Each milliliter of etorphine hydrochloride injection, veterinary, contains 1 mg of etorphine hydrochloride in sterile aqueous solution.

(c) *Sponsors.* See No. 053923 in § 510.600(c) of this chapter.

(d) *Conditions of use.* (1) The drug is used for the immobilization of wild and exotic animals.

(2) It is administered intramuscularly by hand syringe or syringe dart at a suitable dosage level depending upon the species.

(3) Do not use the drug unless diprenorphine hydrochloride injection, veterinary, as provided for in § 522.723, is available for use in reversing the effects of etorphine hydrochloride injection, veterinary.

(4) For use in wild or exotic animals only. Do not use in domestic food-producing animals. Do not use 30 days before, or during, the hunting season in free-ranging wild animals that might be used for food.

(5) Federal law restricts this drug to use by or on the order of a licensed veterinarian. Distribution is restricted to veterinarians engaged in zoo and exotic animal practice, wildlife management programs, and researchers.

[40 FR 13858, Mar. 27, 1975, as amended at 48 FR 16241, Apr. 15, 1983; 61 FR 260, Jan. 4, 1996]

§ 522.900 Euthanasia solution.

(a) [Reserved]

(b)(1) *Specifications.* Each milliliter of nonsterile solution contains 390 milligrams of pentobarbital sodium and 50 milligrams of phenytoin sodium.

(2) *Sponsor.* Nos. 000061 and 059079 in § 510.600(c) of this chapter.

(3) *Conditions of use*—(i) *Indications for use.* For the humane, painless, and rapid euthanasia of dogs.

(ii) *Amount.* One milliliter (390 milligrams of pentobarbital sodium and 50 milligrams of phenytoin sodium) for each 10 pounds of body weight.

(iii) *Limitations.* For intravenous injection or intracardiac injection when intravenous use is impractical. Do not use for therapeutic purposes. Do not use in animals intended for food. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

(c)(1) *Specifications.* Each milliliter of nonsterile, aqueous solution contains 400 milligrams of secobarbital sodium and 25 milligrams of dibucaine hydrochloride.

(2) *Sponsor.* See 000033 in § 510.600(c) of this chapter.

[1] These conditions are NAS/NRC reviewed and deemed effective. Applications for these uses need not include effectiveness data as specified by § 514.111 of this chapter, but may require bioequivalency and safety information.